

Carbon Tech Alliance

Collaboration for Success

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CARBON
TECH
ALLIANCE

Your source for best practices in CCS science and technology

Commitment to CCS by DOE Secretary Chu

“If the U.S. doesn’t act now to get CCS working, we will be importing these technologies 10–20 years from today.”

US DOE Secretary Chu



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Mission

Carbon Tech Alliance will be a leader of CCS education while providing:

- effective training and content to the future CCS workforce, those in related fields, and any others interested in understanding how CCS can be applied.



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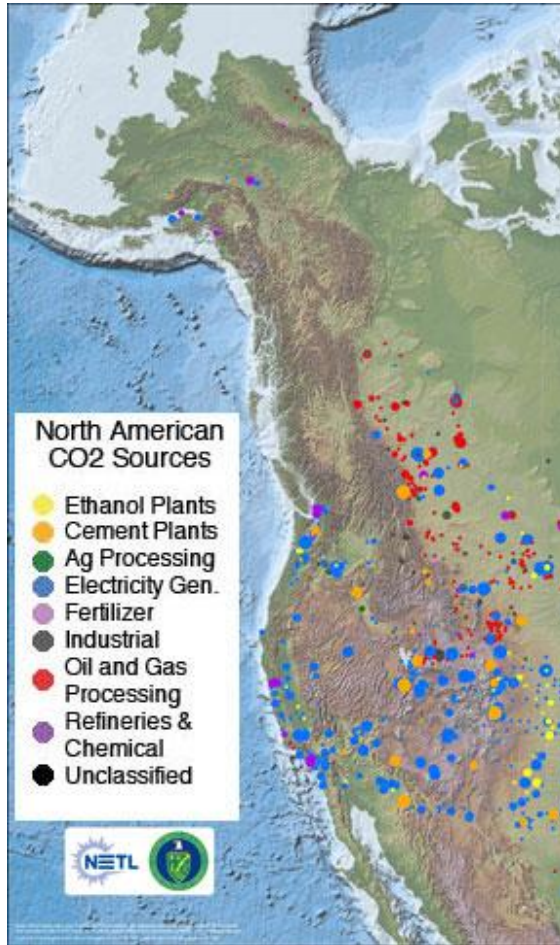
Initial Scope of Program



Topics:

- ▶ CCS overview
- ▶ site characterization
- ▶ site selection
- ▶ permitting and liability
- ▶ public perception and communication
- ▶ drilling issues
- ▶ CO₂ injection
- ▶ Monitoring/ verification

Initial Scope of Program



Geographical focus:

- ▶ Northwestern U.S. and western Canada

Credit Hours/Cert's:

- ▶ professional development Hours (PDHs)
- ▶ certification programs

Initial Scope of Program – cont.

Who:

- ▶ industry managers
- ▶ legislators and their staff
- ▶ engineers
- ▶ geologists
- ▶ technicians
- ▶ students
- ▶ general public

How:

- ▶ lectures and multiple-day short courses
- ▶ courses will integrate CCS topics
- ▶ tours of facilities conducting CO₂ sequestration research



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Carbon Tech Alliance Partners



- Environmental Outreach and Stewardship (EOS) Alliance – Lead



- Pacific Northwest National Laboratory



- Washington Society of Professional Engineers



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Project Updates

- **101 CCS Lecture** – Presented May 2010 and developed into video
- **Advisory Board** recruited and held first meeting – June 2010
- **Marketing Strategy** – Draft presented at Advisory Board meeting
- **Carbon Tech Alliance Website** – Went live Oct. 4
- **Social Media** – Facebook and Twitter – Live Oct. 1
- **Short courses** – being developed
- **CCS Exchange** – quarterly newsletter upcoming



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Video – Carbon Capture 101



Pete McGrail Lecture

<http://carbontechalliance.org/ccs-training-videos>



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Advisory Board

Mary Ausburn, AICP

SEPA Project Manager
Department of Ecology

Dr. Stefan Bachu, PEng

Distinguished Scientist, CO2 Storage
Alberta Innovates – Technology Futures

John Biggane, RG, LG, LEG, LHg

Senior Principal/Geo Engineers, Inc.

Will Einstein

Manager of Emerging Technology and Climate Change
Puget Sound Energy

Gretchen E. Hund

Senior Staff Scientist
Pacific Northwest National Laboratory

Dr. Wayne Lei, Chairman

Director of Research and Development
Portland General Electric

Charlotte Sullivan, Senior Research Scientist

Applied Geology and Geochemistry
Energy and Environment Directorate
Pacific Northwest National Laboratory

Lucinda Low Swartz, Esq.

Lucinda Low Swartz Environmental Consulting

David Szatmary, PhD

Vice Provost
University of Washington Educational Outreach

Willis Turner, CAE, CSE

Executive Director
Washington Society of Professional Engineers

David Weatherby

Senior PM/Senior Geologist
URS Corporation

Malcolm Wilson, PhD

Director – Office of Energy and Environment
University of Regina

John Wolff, PhD

Professor & Director of GeoAnalytical Lab
School of Earth & Environmental Sciences
Washington State University



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Web

<http://carbontechalliance.org/>



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UPCOMING TRAINING

Carbon Capture and Storage
Oct 31, 2010 | [Full description >>](#)

WELCOME TO CARBON TECH

Carbon dioxide (CO₂) is a gas implicated in climate change that is emitted through a variety of human activities. An innovative approach for reducing the input of CO₂ into the atmosphere is through capturing manmade CO₂ from large stationary emitters such as power plants, cement plants, and paper mills and permanently storing it deep underground – a process referred to as carbon capture and storage (CCS). The Carbon Tech Alliance's mission is to be a leader of high-quality CCS education while providing effective training and content to the future CCS workforce, those in related fields, and any others interested in understanding how CCS can be applied.

Deploying CCS technologies in commercial-scale applications will require a drastically expanded workforce (including geologists, engineers, scientists, and technicians) trained in CCS specialties. The Carbon Tech Alliance serves as a western U.S. and Canada regional training center designed to educate stakeholders through lecturers, specialized short courses, symposiums, and conferences.



Peter McGrail - Laboratory Fellow
Pacific Northwest National Laboratory

CCS Training Videos

Pete McGrail provides a 101 on carbon capture and storage to members of the Washington Society of Professional Engineers.



CCS Course Catalog

Get information on upcoming courses in your area!

HEADLINES

Make an Impact: Become a Carbon Coach (Sep 14th)

In recent years global warming and carbon footprints have been a hot topic in the news. [Read more](#)

CARBON CAPTURE DIAGRAM



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SUBMIT

Please consider supporting Carbon Tech Alliance.
Contributions are tax deductible.



Affiliates



Sponsorships



HQ Milestone Progress

HQ Milestone	Planned Completion Date	Actual Completion Date
Project Kick-off Meeting	3/31/10	11/18/09
Educational program instituted by identifying potential participants and completing a training schedule	6/30/10	6/30/10
Complete first lecture video series.	9/30/10	7/1/10
Semi-Annual Progress Report	9/30/10	
Complete first classes for regional sequestration technology training	12/31/10	
Trainers visit one field site	12/31/10	
Yearly Review Meeting	3/31/11	

Building the Brand



- Building on EOS Training model – 10 plus years of success
- Finalizing Marketing Plan
- Completed and implementing Branding Plan
- Collaborating with high-quality partners
- Using Web and Social Media tools
- Updating program based on feedback



Next Steps

- ▶ Develop additional courses
- ▶ Develop University Partnership (s) – University of Washington Extension
- ▶ Further collaborations with STEP Illinois
- ▶ Develop professional credit options
- ▶ Investigate developing certification program
- ▶ Publish quarterly newsletter
- ▶ Distribute Tech Alerts (as the market demands)



POWERFUL CHANGE ONE THOUGHT AT A TIME

www.eosalliance.org

Facilitation

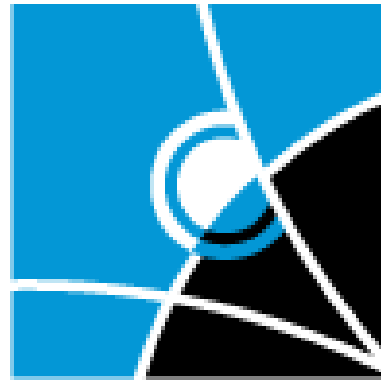
Training

Action



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Questions & Discussion



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Thank you.